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| APPLICATION NO.                        | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. | ]   |
|--|-----------------|----------------------|-------------------------|------------------|-----|
| 09/714,332 11/16/2000                  |                 | Karen Ann Sheppard   | 10236 4336              |                  | _   |
| 23455                                  | 7590 08/26/2003 |                      |                         |                  | _   |
| EXXONMO                                | BIL CHEMICAL CO | EXAMINER             |                         |                  |     |
| P O BOX 2149<br>BAYTOWN, TX 77522-2149 |                 |                      | AHMED, SHEEBA           |                  |     |
|  |                 |                      | ART UNIT                | PAPER NUMBER     | ] [ |
|  |                 |                      | 1773                    |                  | - ` |
|  |                 |                      | DATE MAILED: 08/26/2003 |                  |     |

Please find below and/or attached an Office communication concerning this application or proceeding.

| <u> </u>   |  | Application No.     |       | Applicant(s)                                  | 1   |  |  |  |
|--|--|---------------------|-------|---|-----|--|--|--|
|  |  | 09/714,332          |       | SHEPPARD ET AL.                               |     |  |  |  |
| ``   | Office Action Summary  | Examin r            |       | Art Unit                                      | , a |  |  |  |
|  |  | Sheeba Ahmed        |       | 1773  |     |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period f r Reply   |  |                     |       |   |     |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  |  |                     |       |   |     |  |  |  |
| Status  1) \( \sum_{\text{posterior}} \)  1. \( \sum_{\text{posterior}} \) |  |                     |       |   |     |  |  |  |
| 1)⊠<br>2a\⊠  |  |                     |       |   |     |  |  |  |
| 3)□  | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is                                       |                     |       |   |     |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>   |  |                     |       |   |     |  |  |  |
| 4)⊠ Claim(s) <u>26 and 30-47</u> is/are pending in the application.  |  |                     |       |   |     |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |                     |       |   |     |  |  |  |
| 5) Claim(s) is/are allowed.  |  |                     |       |   |     |  |  |  |
| 6) Claim(s) <u>26 and 30-47</u> is/are rejected.   |  |                     |       |   |     |  |  |  |
| 7)   | 7) Claim(s) is/are objected to.  |                     |       |   |     |  |  |  |
| • —  | Claim(s) are subject to restriction and/o  | r election requiren | nent. |   |     |  |  |  |
| Application Papers   |  |                     |       |   |     |  |  |  |
| 9) The specification is objected to by the Examiner.   |  |                     |       |   |     |  |  |  |
| 10)[] 7  | The drawing(s) filed on is/are: a) accept  |                     |       |   |     |  |  |  |
| 44\[ 7   | Applicant may not request that any objection to the  |                     |       |   |     |  |  |  |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.  If approved, corrected drawings are required in reply to this Office action.   |  |                     |       |   |     |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.  |  |                     |       |   |     |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120  |  |                     |       |   |     |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |  |                     |       |   |     |  |  |  |
| a) All b) Some * c) None of:   |  |                     |       |   |     |  |  |  |
| 1. Certified copies of the priority documents have been received.  |  |                     |       |   |     |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |                     |       |   |     |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  |  |                     |       |   |     |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |  |                     |       |   |     |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).   |  |                     |       |   |     |  |  |  |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  |  |                     |       |   |     |  |  |  |
| Attachment(s)  |  |                     |       |   |     |  |  |  |
| 2) Notic   | e of References Cited (PTO-892)<br>e of Draftsperson's Patent Drawing Review (PTO-948)<br>nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>1</u> | 5) 🔲                |       | y (PTO-413) Paper No<br>Patent Application (P |     |  |  |  |

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#### **DETAILED ACTION**

### Response to Amendment

1. Claims 14-25 and 27-29 have been cancelled in the above-identified application.

New claims 45-47 have been added. Claims 26 and 30-47 are now pending.

#### Terminal Disclaimer

2. The terminal disclaimer filed on June 11, 2003 (Paper No. 13) disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of US 6,472,077 B1 has been reviewed and is accepted. The terminal disclaimer has been recorded.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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3. Claims 31-34, 36-44, and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Sheppard et al. (US 6,455,150 B1).

Sheppard et al. disclose a heat-seal able multilayer film comprising: (a) an upper heat-seal able layer comprising: (1) an ethylene homo- or copolymer, (2) a particulate crosslinked polysiloxane having a particle size of 0.5 to 20 microns, (b) an intermediate core layer comprising a propylene polymer, (c) a lower heat seal able layer comprising: (1) an ethylene homo- or copolymer, (2) a particulate crosslinked polysiloxane having a particle size of 0.5 to 20 microns, (3) 0.15 to 1.5 wt.% of a polysiloxane having a viscosity of 350 to 100,000 centistokes (Abstract and Column 6, lines 36-51). The upper heat seal able layer is printable (Column 3, lines 46-50). Example 1 shows that the amount of component (2) in layers (a) and (c) is 0.2 weight %. In order to improve its receptivity, the upper layer (a) may be flame treated (Column 6, lines 33-35). The polymeric materials used for layers (a) and (c) include LLDPE and medium density polyethylene (Column 5, lines 11-18). Example 1 shows that layer (b) can be 20 microns thick, layer (a) is 0.61 microns and layer (c) is 1.2 microns thick. The addition of antistatic agents to layer (b) is optional (Column 7, lines 22-25). If desired additional layers may be applied to layers (a) and (c) (Column 8, lines 60-68). In general the invention can be practiced with any polymer, copolymer or blend of ethylene, propylene, and butylenes (Column 4, lines 35-46). Furthermore, with regards to the limitations that the film structure has a force over forming collar value of less than 20 pounds and a hot slip value of less than 20 at 290°C, the Examiner takes the position that such property limitations are inherently met by the multilayer film disclosed by

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Sheppard et al. given that the multilayer film has the same structure (i.e., the same number of layers and the same order of layers), the same chemical composition (i.e., each corresponding layer has the same chemical composition), and is processed by the same method (i.e., co-extrusion). All limitations of claims 31-34, 36-44, and 46 are either inherent or disclosed in the above reference.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 26 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheppard et al. (US 6,455,150 B1) in view of Park et al. (US 4,632,869).

Sheppard et al., as discussed above in Paragraph No. 3, fail to disclose that the core layer comprises a cavitating agent selected from the group consisting of polybutylene terephthalate, calcium carbonate and blends thereof.

However, Park et al. disclose opaque films having an improved degree of opacity and an enhanced brightness and having at least one skin layer thereon (Column 1, lines 23-32). The opaque film comprises a thermoplastic polymer matrix comprising void-initiating particles of polybutylene terephthalate (Column 1, lines 41-51). The polybutylene terephthalate has good tensile strength, toughness and dimensional stability, low water absorption and low static and dynamic coefficients of friction

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(Column 2, lines 41-52). The thermoplastic resin matrix of the opaque film may be thermoplastic resin such as polypropylene or polyethylene, polybutylene and copolymers thereof (Column 2, lines 56-68 and Column 3, lines 1-5).

Accordingly, it would have been obvious to one having ordinary skill in the art to add a cavitating agent to the core layer disclosed by Sheppard et al. and to specifically add a polybutylene terephthalate cavitating agent given that Park et al. specifically teach that such films have an improved degree of opacity and an enhanced brightness and that polybutylene terephthalate is a desirable cavitating agent given that it has good tensile strength, toughness and dimensional stability, low water absorption and low static and dynamic coefficients of friction.

5. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sheppard et al. (US 6,455,150 B1)

Sheppard et al, as discussed in Paragraph No. 3, fail to disclose that the first film structure is laminated to a second film structure wherein the second film comprises the same structure as the first film.

However, Sheppard does teach that the film comprises at least three layers and additional layers may be incorporated and hence it would have been obvious to laminate the film structure to another film structure having the same structure as the fist film structure given that the courts have held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *See In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

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6. Claims 45 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheppard et al. (US 6,455,150 B1) in view of Migliorini (US 6,495,266 B1).

Sheppard et al, as discussed in Paragraph No. 3, fail to disclose that layers outer layers (a) and (c) may be ethylene vinyl acetate, ethylene methacrylate, an ionomer or blends thereof.

However, Migliorini teaches that high density polyethylene (HDPE), ethylene propylene butylene (EPB) terpolymer, ethylene-propylene random copolymer, ethylene-propylene impact copolymer, medium density polyethylene (MDPE), linear low density polyethylene (LLDPE), propylene butene copolymer, polypropylene homopolymer, ethylene-vinyl acetate copolymer (EVA), ethylene-methyacrylic acid copolymer (EMA), ethylene-vinyl alcohol copolymer (EVOH) or blends of the aforementioned polymers are equivalent structure when used as outer layers and are known in the art.

Therefore, because these polymers were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute ethylene-vinyl acetate copolymer (EVA), ethylene-methyacrylic acid copolymer (EMA), or ethylene-vinyl alcohol copolymer (EVOH) for LLDPE and medium density polyethylene.

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## Response to Arguments

7. Applicant's arguments with respect to claims 26 and 30-47 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (703)305-0594. The examiner can normally be reached on Mondays and Thursdays from 8am-6pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703)308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5665.

Sheeba Ahmed August 14, 2003 Paul Thibodeau Supervisory Patent Examiner Technology Center 1700